Amendments to the Claims:

1 1.   (currently amended) In a computer system on which one or more applications

2   execute, ~~wherein a first application configuration is defined by first application~~

3   ~~configuration information, the first application configuration providing for~~

4   ~~execution of the application,~~ a computer-implemented method for reconfiguring

5   [[the]] an application without restarting the computer system, comprising:

6   wherein a first application configuration is defined by first application

7   configuration information, the first application configuration information

8   specifying application classes for execution of the application according to

9   the first application configuration;

10   reading second application configuration information defining a reconfigured

11   version of the application, the second application configuration

12   information specifying application classes for execution of the application

13   according to the reconfigured version of the application;

14   constructing a second application configuration based on the second application

15   configuration information; and

16   providing the second application configuration to an application runtime

17   environment for servicing new requests related to the application while

18   maintaining the first application configuration for servicing, concurrently

19   with the servicing of new requests based on the second application

20   configuration, existing requests related to the application.

1 2.   (original) The method of claim 1, further comprising:

2   destroying the first application configuration upon completion of all application

3   service requests using the first application configuration, whereby

4   computer system resources used to maintain the first application

5   configuration are made available for other uses.

1   3.   (original) The method of claim 1, further comprising:

2   accessing persistent session information related to an existing application user

3   session to use for servicing new requests from the same user during the

4   existing application user session.

1   4.   (original) The method of claim 1, further comprising:

2   determining that the second application configuration successfully initialized prior

3   to providing the second application configuration to the runtime

4   environment for servicing new requests.

1   5.   (original) The method of claim 4, wherein the step of determining that the second

2   application configuration successfully initialized is based on a communication

3   from the application runtime environment.

1   6.   (original) The method of claim 1, further comprising:

2   receiving a request to reconfigure the computer system; and

3   reconfiguring the computer system in response to the request.

1   7.   (original) The method of claim 1, wherein constructing the second application

2   configuration is further based on an application runtime environment

3   configuration.

1   8.   (original) The method of claim 7 wherein constructing the second application

2   configuration includes:

3   reading a timestamp associated with the second application configuration

4   information; and

5   determining that the second application configuration information is different than

6   the first application configuration information based on the timestamp.

1   9.   (original) The method of claim 1 wherein constructing the second application

2   configuration includes:

3   reading a timestamp associated with a class file referenced in the second

4   application configuration information;

5   determining that the class file has changed based on the timestamp; and

6   constructing the second application configuration, at least in part, according to the

7   changed class file.

1   10.   (original) The method of claim 1, further comprising:

2   logging one or more messages related to providing the second application

3   configuration to the computer system.

1   11.   (original) The method of claim 1, wherein providing the second application

2   configuration comprises:

3   updating a current configuration reference to reference the second application

4   configuration rather than the first application configuration.

1   12.   (original) The method of claim 11, wherein updating the current configuration

2   reference is performed atomically.

1   13.   (original) The method of claim 1 wherein the first application configuration is

2   maintained for servicing, without interruption, existing requests related to the

3   application from an existing connection.

1   14.   (currently amended) In a computer system on which one or more applications

2   execute, wherein a former application configuration is defined by a first

3   application configuration information and a current application configuration is

4   defined by a second application configuration information, the application

5   configurations providing for execution of the application, a computer-

6   implemented method for processing application service requests, comprising:

7   <u>wherein the first application configuration information specifies application</u>

8   <u>classes for execution of the application according to the former application</u>

9   <u>configuration and the second application configuration information</u>

10   <u>specifies application classes for execution of the application according to</u>

11   <u>the current application configuration;</u>

12   completing processing<u>, based at least in part on the application classes specified</u>

13   <u>in the first application configuration information,</u> a pending first request

14   for an application service that is associated, via a global variable, with the

15   former application configuration;

16   receiving a second request for an application service;

17   associating, via a global variable, the second request with the current application

18   configuration;

19   accessing the second application configuration information defining the current

20   application configuration; and

21   processing the second request ~~according to~~ <u>based at least in part on the application</u>

22   <u>classes specified in</u> the second application configuration information.

1   15.   (original) The method of claim 14 wherein the pending first request and the

2   second request originate from the same user session, and wherein completing

3   processing the pending first request and processing the second request are

4   performed without restarting the computer system.

1   16.   (original) The method of claim 14, further comprising:

2   determining whether the first application configuration information is referenced

3   by at least one pending process; and

4   deleting the first application configuration information from the computer system

5   in response to determining that the first application configuration

6   information is not referenced by at least one pending process.

1   17.   (original) The method of claim 16, wherein the first application configuration

2   information occupies one or more blocks of memory, and wherein deleting the

3   first application configuration comprises:

4   releasing the one or more blocks of memory.

1   18.   (original) The method of claim 16, wherein determining whether the first

2   application configuration information is referenced by at least one pending

3   process comprises:

4   determining whether a reference count is equal to a predetermined value

5   indicating that no processes are referencing the first application

6   configuration information.

1   19.   (currently amended) In a computer system on which one or more applications

2   execute, wherein a plurality of application configurations are defined by a

3   plurality of associated application configuration information and one application

4   configuration of the plurality of application configurations is the current

5   configuration associated with a current version of a first application and two or

6   more other application configurations of the plurality of application

7   configurations are former configurations associated with former versions of the

8   first application, a computer-implemented method for processing application

9   service requests, comprising:

10   completing processing one or more pending requests for application services that

11   are associated with any of the former configurations according to

12   <u>corresponding</u> former configuration information that is associated with

13   each of the one or more pending requests <u>and that specifies application</u>

14   <u>classes for execution of the application according to a corresponding</u>

15   <u>former configuration, wherein the one or more pending requests are</u>

16   <u>processed based at least in part on the application classes specified in the</u>

17   <u>corresponding former configuration information</u>;

18   while completing processing the one or more pending requests,

19   receiving a new request for an application service,

20   accessing current application configuration information defining the

21   current configuration <u>and specifying application classes for</u>

22   <u>execution of the application according to the current configuration;</u>

23   and

24   processing the new request ~~according to~~ <u>based at least in part on the</u>

25   <u>application classes specified in</u> the current application

26   configuration information.

1   20.   (currently amended) In a computer system on which one or more applications

2   execute, ~~wherein a current application configuration is defined by a first~~

3   ~~application configuration information, the current configuration providing for~~

4   ~~execution of the application,~~ a computer-readable medium comprising

5   instructions which, when executed by one or more processors, cause the one or

6   more processors to reconfigure [[the]] an application without restarting the

7   computer system, by performing the steps of:

8   wherein a first application configuration is defined by first application

9   configuration information, the first application configuration information

10   specifying application classes for execution of the application according to

11   the first application configuration;

12   reading second application configuration information defining a reconfigured

13   version of the application, the second application configuration

14   information specifying application classes for execution of the application

15   according to the reconfigured version of the application;

16   constructing a second application configuration based on the second application

17   configuration information; and

18   providing the second application configuration to an application runtime

19   environment for servicing new requests related to the application while

20   maintaining the first application configuration for servicing, concurrently

21   with the servicing of new requests based on the second application

22   configuration, existing requests related to the application.

1   21.   (original) The computer readable medium of claim 20, wherein execution of the

2   instructions by the one or more processors causes the one or more processors to

3   perform:

4   destroying the first application configuration upon completion of all application

5   service requests using the first application configuration, whereby

6   computer system resources used to maintain the first application

7   configuration are made available for other uses.

1   22.   (original) The computer readable medium of claim 20, wherein execution of the

2   instructions by the one or more processors causes the one or more processors to

3   perform :

4   accessing persistent session information related to an existing application user

5   session to use for servicing new requests from the same user during the

6   existing application user session.

1   23.   (original) The computer readable medium of claim 20, wherein execution of the

2   instructions by the one or more processors causes the one or more processors to

3   perform:

4   determining that the second application configuration successfully initialized prior

5   to providing the second application configuration to the runtime

6   environment for servicing new requests related to the application.

1   24.   (original) The computer readable medium of claim 23, wherein execution of the

2   instructions by the one or more processors causes the one or more processors to

3   perform the step of determining that the second application configuration

4   successfully initialized based on a communication from the application runtime

5   environment.

1   25.   (original) The computer readable medium of claim 20, wherein execution of the

2   instructions by the one or more processors causes the one or more processors to

3   perform:

4   receiving a request for reconfiguring the computer system absent any changes to

5   the computer system configuration; and

6   reconfiguring the computer system based on the second application configuration

7   in response to the request.

1   26.   (original) The computer-readable medium of claim 20, wherein constructing a

2   second application configuration is based on the second application configuration

3   information and an application runtime environment configuration, and wherein

4   execution of the instructions by the one or more processors causes the one or

5   more processors to perform providing the second application configuration to the

6   server for servicing new requests related to the application according to the

7   second application configuration.

1   27.   (original) The computer-readable medium of claim 26 wherein execution of the

2   instructions by the one or more processors causes the one or more processors to

3   perform constructing the second application configuration by performing the steps

4   of:

5   reading a timestamp associated with the second application configuration

6   information; and

7   determining that the second application configuration information is different than

8   the first application configuration information based on the timestamp.

1   28.   (original) The computer-readable medium of claim 20 wherein execution of the

2   instructions by the one or more processors causes the one or more processors to

3   perform constructing the second application configuration by performing the steps

4   of:

5   reading a timestamp associated with a class file referenced in the second

6   application configuration information;

7   determining that the class file has changed based on the timestamp; and

8   constructing the second application configuration, at least in part, according to the

9   changed class file.

1   29.   (original) The computer readable medium of claim 20, wherein execution of the

2   instructions by the one or more processors causes the one or more processors to

3   perform :

4   logging one or more messages related to providing the second application

5   configuration to the computer system.

1   30.   (original) The computer-readable medium of claim 20 wherein execution of the

2   instructions by the one or more processors causes the one or more processors to

3   perform providing the second application configuration by performing the steps

4   of:

5   updating a current configuration reference to reference the second application

6   configuration rather than the first application configuration.

1   31.   (original) The computer-readable medium of claim 30 wherein execution of the

2   instructions by the one or more processors causes the one or more processors to

3   perform updating the current configuration reference atomically.

1   32.   (currently amended) In a computer system on which one or more applications

2   execute, wherein a former application configuration is defined by a first

3   application configuration information and a current application configuration is

4   defined by a second application configuration information, the application

5   configurations providing for execution of the application, a computer-readable

6   medium comprising instructions which, when executed by one or more

7   processors, cause the one or more processors to process application service

8   requests, by performing the steps of:

9   wherein the first application configuration information specifies application

10   classes for execution of the application according to the former application

11   configuration and the second application configuration information

12   specifies application classes for execution of the application according to

13   the current application configuration;

14   completing processing, based at least in part on the application classes specified

15   in the first application configuration information, a pending first request

16   for an application service that is associated, via a global variable, with the

17   former application configuration;

18   receiving a second request for an application service;

19   associating, via a global variable, the second request with the current application

20   configuration;

21   accessing the second application configuration information defining the current

22   application configuration; and

23   processing the second request ~~according to~~ based at least in part on the application

24   classes specified in the second application configuration information.

1   33.   (original) The computer-readable medium of claim 32 wherein the pending first

2   request and the second request originate from the same user session, and wherein

3   execution of the instructions by the one or more processors causes the one or

4   more processors to perform completing processing the pending first request and

5   processing the second request without having to restart the computer system.

1 34. (original) The computer-readable medium of claim 32 wherein execution of the

2 instructions by the one or more processors causes the one or more processors to

3 perform the steps of:

4 determining whether the first application configuration information is referenced

5 by at least one pending process; and

6 deleting the first application configuration information from the computer system

7 in response to determining that the first application configuration

8 information is not referenced by at least one pending process.

1 35. (original) The computer-readable medium of claim 34, wherein the first

2 application configuration information occupies one or more blocks of memory,

3 and wherein execution of the instructions by the one or more processors causes

4 the one or more processors to perform deleting the first application configuration

5 by performing :

6 releasing the one or more blocks of memory.

1 36. (original) The computer-readable medium of claim 34, wherein execution of the

2 instructions by the one or more processors causes the one or more processors to

3 perform determining whether the first application configuration information is

4 referenced by at least one pending process by performing :

5 determining whether a reference count associated with the first application

6 configuration information is equal to a predetermined value indicating that

7 no processes are referencing the first application configuration

8 information.

1   37.   (original) The computer readable medium of claim 36, wherein execution of the

2   instructions by the one or more processors causes the one or more processors to

3   perform determining that the second application configuration successfully

4   initialized based on a communication from an application runtime environment.

1   38.   (currently amended) An apparatus on which one or more applications execute, wherein

2   a first application configuration is defined by first application configuration

3   information, the first application configuration providing for execution of the

4   application, the apparatus comprising:

5   a network interface;

6   a memory; and

7   one or more processors connected to the network interface and the memory, the one or

8   more processors configured for

9   wherein a first application configuration is defined by first application configuration

10   information, the first application configuration information specifying

11   application classes for execution of the application according to the first

12   application configuration;

13   reading second application configuration information defining a reconfigured version of

14   the application, the second application configuration information specifying

15   application classes for execution of the application according to the reconfigured

16   version of the application;

17   constructing a second application configuration based on the second application

18   configuration information; and

19   providing the second application configuration to an application runtime environment

20   for servicing new requests related to the application while maintaining the first

21   application configuration for servicing, concurrently with the servicing of new

22   requests based on the second application configuration, existing requests related

23   to the application.